Swami Ramanand Teerth Marathwada University, Nanded

Effectiveness of financial management information system in improving financial performance in Yemeni universities

(Ph. D Research proposal in management sciences)

Submitted by

Mr. Fahd Ali Hamad Saeed Garadan

Under the guidance of

Prof. Vani Laturkar

School of Commerce and Management Sciences

2025 -2026

Content	Page Number
1.1 Introduction	1
1.2 Literature review	1
1.3 Problem statement	4
1.4 Objectives of the study	7
1.5 The significance of the study	7
1.6 Hypothesis of the study	8
1.7 Sampling	9
1.8 Sources of data collection	9
1.9 The limitations of the study	10
1.10 Procedural terms of the study	10
1.11 Chapter scheme of the study	11
1.12 References	12

1.1 Introduction:

Financial management information systems (FMIS) are vital tools that contribute to improving financial performance and enhancing the effectiveness of resource management in various government and private sectors. These systems provide a comprehensive framework for financial planning, budgeting, and controlling revenues and expenditures, enabling government entities to manage public funds efficiently and transparently. Despite the rapid developments in information technology and computing systems, the public and private sectors in many developing countries, including Yemen, still face significant challenges in effectively implementing these systems.

In this context, it becomes clear that Yemen is facing a range of economic and financial challenges that require innovative solutions, especially in light of the ongoing economic and political crises in the country. Therefore, improving financial performance is critically important to ensure sustainable development and equitable distribution of financial resources.

This study aims to shed light on the effectiveness of financial management information systems in improving financial performance within Yemeni universities, by studying the effectiveness of these systems in improving financial operational efficiency, enhancing financial transparency, improving the efficiency of financial spending, and enhancing compliance with financial regulations and laws, as well as the financial decision-making process in both public and private Yemeni universities.

This research will review international experiences in using financial management information systems and analyze how the Yemeni government can benefit from these systems to enhance the effectiveness of financial management. Additionally, the study will offer recommendations on how to improve the implementation of these systems in Yemen in line with current economic conditions and the requirements of sustainable development.

The study of the effectiveness of financial management information systems in enhancing financial performance in government sectors is an essential step toward improving financial transparency and ensuring the optimal use of public resources. This will contribute to supporting national economic stability and achieving sustainable development in Yemen

1.2 Literature review:

a. Njonde, J. N. & Kimanzi, K. (2014).

This study explores the effectiveness of the Integrated Financial Management Information System (IFMIS) on the performance of the public sector in Kenya, specifically focusing on Nairobi County Government. With increasing scrutiny on public finance management, the study investigates how the government has utilized IFMIS to address issues of financial

accountability and service delivery. The research evaluates four key variables: financial reporting, budgeting, internal control, and project implementation. Using a descriptive research design, data was collected from 150 employees in the finance and public works departments. Both descriptive and inferential statistical analyses were employed to assess the impact of IFMIS. The findings reveal that IFMIS has significantly improved financial reporting, budgeting, and internal controls, though challenges persist in the internal control module. The regression analysis indicates a strong positive relationship between IFMIS effectiveness and public finance management, with 72.4% of the effectiveness attributed to the studied variables. The study recommends enhancing the system, particularly the internal controls, to further improve public sector performance and service delivery.

b. Charfi, K., Shaibi, S., Louati, & Khatima. (2022).

Many researchers has interested the subject of information system because it consistent with the requirement of the modern era where the need for data and information collection, processing and use them effectively came to basic requirement for the success of organization in various forms in the present era which is characterized by ongoing environ mental and complex changes , and become obligation on enterprises that use information systems for use in decision making on functions of administration. Through the above we will try in this study to evaluate the extent of use of enterprise information system and its role in decision making has been reached that the information systems used in opgi ain temouchent have a great significance to reach the right decisions as they provide the decision maker with the continue ha work well and reach the desired goals.

c. **Monteiro, A. P., Vale, J., Leite, E., Lis, M., & Kurowska-Pysz, J. (2022)**.

This study aims to develop and evaluate a model that seeks to measure the impact of Accounting Information System Quality, Internal Control System Quality and Non-Financial Information Quality on company success (Decision-Making Success and Non-Financial Performance). This model is empirically tested with data obtained from the managers of 381 Portuguese companies. We use structural equation modelling in the analysis of causal relationships between different constructs. The results show that information and control systems quality (accounting and in ternal control) have a direct impact on Non-Financial Information Quality and an indirect impact on Decision-Making Success. The results also indicate that Quality Non-Financial Information does not contribute directly to Non-Financial Performance but contributes indirectly via Decision- Making Success. The exploratory variables prove to be crucial for the companies' Non-Financial Performance, accounting for its 62% variance. Previous research focuses primarily on financial information quality and

financial performance. This study is the first to empirically prove that information and control systems contribute favourably to the transparency and value-relevance of non-financial information and, consequently, to business success.

d. Savina, S., & Kuzmina-Merlino, I. (2015).

The new management paradigm and the necessity to implement company's strategy makes the management of the companies analyze characteristics and structure of the financial management system and applied investment and financing models using the elements of strategic and operative financial management. The analysis of methods and tools being applied, as well as the formation of conceptual basis for the financial management is the first step on the way to the enhancement of the financial management efficiency. Problems are often associated with the necessity to combine individual elements of financial management into a unified, well-adjusted system and to coordinate its functioning. Therefore, there is a growing need for the development of the financial management system that would be directly linked to the strategic goals of the company. Research objective: to develop recommendations for the formation of an effective financial management system based on process-oriented approach for Latvian multi business companies that would be aimed at meeting the strategic goals of the company.

e. Hijazin, A. M. N. (2024).

The study aimed to identify financial management information systems (FMIs) and their role in improving financial performance in municipalities. The study addressed financial management tools, including planning, implementation, monitoring, budget preparation, prioritizing and implementing expenditures, and contributing to the efficiency and equity of financial operations. The study demonstrated that FMIs encompass the decision-making process related to operating and capital budgets, accounting reports, working capital reports, cash flow forecasts, ratio analysis, financial modeling, and financial forecasting, all supported by accurate and reliable data from the FMI system. The study relied on the descriptive-analytical approach, the most prominent of which is based on analyzing social phenomena by identifying their characteristics, forms, relationships, and the factors influencing them. This approach described and analyzed FMIs and their role in improving financial performance in municipalities. The study reached a set of recommendations and findings. It confirmed that FMIs rely on financial process automation applications, which enhance database management systems and financial accounting systems used to facilitate the automation process. The study recommended that municipalities strengthen financial management tools, including planning,

implementation, monitoring, budget preparation, expenditure prioritization and implementation, and contribute to the efficiency and equality of financial operations.

f. Hartikayanti, H. N., Bramanti, F. L., & Gunardi, A. (2018).

This study aims to determine the factors that affect the effectiveness of financial information systems implemented by private universities in the educational process, through the dimensions of manager role, knowledge manager, and technological sophistication. The research uses quantitative and descriptive approaches. The population in this study is Private Universities in Cimahi, Indonesia. Testing of research data is done through validity test with Rank Spearman correlation coefficient and reliability test with Cronbach Alpha coefficient. Meanwhile, to analyze the data multiple descriptive regression analysis (multiple regression analysis) is used. The results showed what has been done then it concluded that the role of managers, knowledge owned by managers and the sophistication of information technology owned by private universities can affected the performance of the university. The role of manager and the technological sophistication significantly influence the effectiveness of financial information systems while managers' knowledge has no significant effect. The most important recommendation of this research is the importance of reconsidering the selection of technical specifications that meet the needs of more and more data in addition to ongoing training for financial managers.

g. Parikh, T., Ghosh, K., & Chavan, A. (2002).

This study includes the design of an innovative user interface for community financial institutions in India's gateway areas, specifically for self-help groups (SHGs), which are predominantly composed of semi-literate rural women. The organization focused on designing a financial information system that would help these groups accurately and effectively manage, monitor, and track financial transactions. The study began by analyzing real microfinance in India, where SHGs are an essential part of the rural financial network, with all individuals managing their loans for productive purposes. Given the improved modern procedures in these areas and the difficulty of accessing details, documentation and monitoring are significantly needed for transparency and sustainability. To define a user-centered design, they conducted three major field studies in Maharashtra and Tamil Nadu to explore transactional and commercial perspectives, and field tests using paper-based models and interactive prototypes.

1.2.1 Research gap:

A review of the existing literature demonstrates that numerous studies have investigated the role of Financial Management Information Systems (FMIS) in enhancing financial and administrative performance across various sectors. For example, Njonde and Kimanzi (2014)

examined the effectiveness of the Integrated Financial Management Information System (IFMIS) in improving financial accountability and budgeting within Kenya's public sector; Charfi et al. (2022) explored the role of information systems in supporting financial decision-making in Algerian organizations; Monteiro et al. (2022) analyzed how accounting and internal control systems influence decision-making and non-financial performance in Portuguese firms; Hijazin (2024) studied the role of FMIS in improving financial performance in municipalities; Hartikayanti et al. (2018) focused on factors affecting the effectiveness of financial information systems in Indonesian private universities; and Parikh et al. (2002) designed a financial management interface for rural microfinance groups in India.

While these studies have made meaningful contributions to understanding the relationship between FMIS and financial performance, important research gaps remain. First, most prior research has focused on public sector institutions, municipalities, or private enterprises, with very limited empirical evidence related to higher education institutions, particularly within developing countries such as Yemen. Second, previous studies have typically examined FMIS in relation to single or limited financial dimensions, such as budgeting, reporting, or accountability. Consequently, there is a clear lack of comprehensive studies that assess the effectiveness of FMIS across multiple, interrelated dimensions of financial performance.

1. Financial operational efficiency, through automation and effective resource utilization.
2. Financial transparency, by ensuring accuracy, accessibility, and timely dissemination of financial data.
3. Efficiency of financial spending, by supporting control over costs and optimizing expenditures.
4. Compliance with financial regulations and laws, by facilitating monitoring and enforcement of financial policies.
5. Financial decision-making, by providing reliable, real-time financial information to guide strategic and operational choices.

Moreover, comparative research examining differences between public and private universities in the effectiveness of FMIS remains scarce, leaving an unexplored area regarding how institutional type and governance structures may influence financial performance outcomes.

Given the limited research conducted in the context of Yemeni higher education, coupled with the nation's financial and administrative challenges, there is an urgent need for empirical evidence to understand how FMIS can enhance financial performance across these five critical dimensions. Therefore, this study seeks to fill this gap by investigating the effectiveness of

Financial Management Information Systems in improving financial performance in Yemeni universities, while also determining whether significant differences exist between them.

1.3 Problem statement:

The Yemeni government faces significant challenges in improving its financial performance, particularly in light of the deteriorating economic situation and the difficulties encountered by various government sectors. Among these challenges, the problem of weak financial performance and inefficiency in many government institutions stands out, leading to poor utilization of resources and reducing the effectiveness of developmental and economic activities.

Despite the noticeable advancements in information technology and the widespread adoption of financial management information systems (FMIS) in many countries, the implementation of FMIS in Yemen still faces several obstacles. These include deficiencies in technological infrastructure, difficulties in integrating modern systems with existing administrative structures, and a lack of adequately trained personnel to effectively utilize these systems. This situation hinders the improvement of financial transparency and accountability in managing public funds, increasing the risk of financial corruption and negatively impacting the decision-making process in government financial operations.

Thus, the problem of this study is crystallized in the following main question

How effective are financial management information systems (FMIS) in improving financial performance in Yemeni universities?

1. How effective are financial management information systems in improving financial operational efficiency in Yemeni universities?
2. How effective are financial management information systems in enhancing financial transparency in Yemeni universities?
3. How effective are financial management information systems in improving the efficiency of financial spending in Yemeni universities?
4. How effective are financial management information systems in enhancing compliance with financial regulations and laws in Yemeni universities?
5. How effective are financial management information systems in improving the financial decision-making process in Yemeni universities?

   Are there statistically significant differences in the effectiveness of financial management information systems in improving financial performance among Yemeni universities, attributable to geographical region?

1.4 Objectives of the study:

The main objective of the research

1. To determine the effectiveness of financial management information systems in improving financial performance in Yemeni universities.

Sub-objectives of the research

2. To determine the effectiveness of financial management information systems in improving financial operational efficiency in Yemeni universities.
3. To explore the effectiveness of financial management information systems in enhancing financial transparency in Yemeni universities.
4. To investigate the effectiveness of financial management information systems in improving the efficiency of financial spending in Yemeni universities.
5. To analyze the effectiveness of financial management information systems in enhancing compliance with financial regulations and laws in Yemeni universities.
6. To evaluate the effectiveness of financial management information systems in improving the financial decision-making process in Yemeni universities.
7. To identify statistically significant differences in the effectiveness of financial management information systems in improving financial performance between Yemeni universities, and to determine the extent to which university type affects these differences.

1.5 Significance of the study:

a. Practical significance:

1. The study enhances scientific understanding of the effectiveness of financial management information systems in improving financial operational efficiency within Yemeni universities.
2. The study provides academic insights into how to enhance financial transparency in universities through the implementation of modern financial management information systems.
3. The study contributes to understanding how to improve the efficiency of financial spending by rationalizing expenditures and ensuring the optimal use of available financial resources.
4. The study helps identify the effectiveness of financial management information systems in enhancing compliance with financial regulations and laws within Yemeni universities.

5. The study enriches scientific knowledge about the effectiveness of financial management information systems in supporting financial decision-making, thereby contributing to improving financial performance and achieving the goals of educational institutions.

b. Scientific significance:

1. The results of this study contribute to helping Yemeni universities raise their financial operational efficiency by employing financial management information systems (FMIS) to plan, allocate, and utilize resources more effectively, thereby enhancing the overall financial performance of educational institutions.
2. The study provides a practical framework for developing transparency mechanisms in financial resource management through FMIS. This is achieved by improving the flow, accuracy, and timeliness of information, thereby enhancing trust and accountability within universities.
3. The study enables university decision-makers to improve the efficiency of financial spending through the use of analytical tools and accurate reports provided by FMIS. This helps control expenditures and ensure the optimal use of available resources.
4. The study contributes to strengthening financial compliance mechanisms within Yemeni universities by employing FMIS as a means of self-monitoring and ensuring compliance with applicable financial laws and regulations, thus reducing the likelihood of waste and financial violations.
5. The study enables university financial decision-makers to access accurate and up-to-date financial data, which supports strategic and financial decisions based on reliable information and enhances the overall quality and efficiency of administrative and financial processes.

1.6 Hypothesis of the study:

a. Main hypothesis:

There is no statistically significant relationship between the effectiveness of financial management information systems (FMIS) and the improvement of financial performance in Yemeni universities at the 0.05 significance level.

b. Sub hypotheses:

1. There is no statistically significant relationship between the effectiveness of financial management information systems (FMIS) and the improvement of financial operational efficiency in Yemeni universities at the 0.05 significance level.

2. There is no statistically significant relationship between the effectiveness of financial management information systems (FMIS) and the enhancement of financial transparency in Yemeni universities at the 0.05 significance level.
3. There is no statistically significant relationship between the effectiveness of financial management information systems (FMIS) and the improvement of financial spending efficiency in Yemeni universities at the 0.05 significance level.
4. There is no statistically significant relationship between the effectiveness of financial management information systems (FMIS) and the enhancement of compliance with financial regulations and laws in Yemeni universities at the 0.05 significance level.
5. There is no statistically significant relationship between the effectiveness of financial management information systems (FMIS) and the improvement of the financial decision-making process in Yemeni universities at the 0.05 significance level.
6. There are no statistically significant differences in the effectiveness of financial management information systems (FMIS) in improving financial performance between Yemeni universities attributable to the type of university.

1.7 Sampling:

The researcher will rely on the descriptive approach, using both the survey and analytical methods.

a. Population of the study:

The study population will consist of the Yemeni universities.

b. Sample of the study:

The study sample will consist of a number of Yemeni universities in four Yemeni governorates: Marib, Hadramout, Taiz, and Aden. The sample will be selected from among the finance department staff and policy-making authorities who use financial management information systems (FMIS), as they represent the target group of the study. The sample will be selected either randomly or purposively, depending on the research requirements and scientific objectives, to ensure accurate and appropriate representation.

c. Statistical data process of the study:

The statistical program (SPSS) will be used to analyze the data.

1.8 Sources of data collection:

a. Secondary sources*:*

They are documents shared by sample organization scientific theses, research papers, books, articles, reports, and websites.

b. Primary Sources:

They are the field data collection tool the questionnaire from sample respondents.

1.9 Limitations of the study:

a. Theoretical Limitations:

This study is limited to a specific topic, namely, the effectiveness of financial management information systems (FMIS) in improving financial performance.

b. Place limitations:

This study is confined to the Yemeni universities.

c. Human limitations:

This study is limited to employees of Yemeni universities located in the governorates of Marib, Hadramout, Taiz, and Aden.

1.10 Procedural terms of the study:

a. Financial management information systems:

Financial Management Information Systems" refers to the effective use of information technology systems designed to manage financial operations within organizations. These systems include the collection and analysis of financial data, report preparation, budget management, and monitoring of revenues and expenditures (Al-Okaily, M. et al. 2025).

b. Improving financial performance:

The term "Improving Financial Performance" refers to the efforts aimed at enhancing the efficiency and effectiveness of financial resource management within public institutions. This includes improving the use of public funds, enhancing financial planning capabilities, reducing financial waste, and promoting transparency in financial resource management (Almaskar, T. et al. 2025).

c. Yemeni public universities:

They are higher education institutions that are administratively and financially affiliated with the state and funded primarily from the Yemeni government's general budget. These universities operate in accordance with the policies and legislation of the Ministry of Higher Education and Scientific Research, and aim to provide university education, scientific research, and community service in line with national development plans. Public universities are the cornerstone of the higher education system in Yemen, given their role in preparing qualified human cadres in various academic and professional disciplines (Aldowah, H., Ghazal, S., & Muniandy, B. 2015).

d. Yemeni Private Universities:

They are administratively and financially independent higher education institutions, established with funding from the private sector, individuals, or civil society organizations. They are subject to the supervision of the Ministry of Higher Education and Scientific Research to ensure the quality of the educational process and adherence to national academic standards. These universities aim to provide additional educational opportunities that contribute to the absorption of secondary education outcomes, human resource development, and meeting the needs of the labor market through flexible, diverse, and innovative academic programs (Al-Nashmi, M. M., & Aldois, H. A. 2017).

1.11 Chapter scheme of the study:

- ✓ Chapter One: Introduction.
- ✓ Chapter Two: Review of literature.
- ✓ Chapter Three: Profile of sample respondents.
- ✓ Chapter Four: Data analysis and interpretation.
- ✓ Chapter Five: Conclusions and suggestions.
- ✓ Bibliography.
- ✓ Appendices.

1.12 References:

1. Al-Okaily, M., Al-Kofahi, M., Shiyyab, F. S., & Al-Okaily, A. (2025). Determinants of user satisfaction with financial information systems in the digital transformation era: insights from emerging markets. Global Knowledge, Memory and Communication, 74(3-4), 1171-1190.
2. Almaskar, T. H., Mohamad, E., Shafee, N. A. Q. M., & Yahaya, S. N. (2025). The role of financial governance on institutional performance: A review study. Multidisciplinary Reviews, 8(8), 2025238-2025238.
3. Al-Nashmi, M. M., & Aldois, H. A. (2017). The Relationship between Administrative Innovation and Competitive Advantage in Yemeni Private Universities. *The Arab Journal for Quality Assurance in Higher Education*, *10*(29), 181-199.
4. Aldowah, H., Ghazal, S., & Muniandy, B. (2015). Issues and challenges of using e-learning in a Yemeni Public University. *Indian Journal of Science and Technology*, *8*(32), 1-9. digitalisation of business education (pp. 345-358). Singapore: Springer Nature Singapore.
5. Njonde, J. N. & Kimanzi, K. (2014). Effect of integrated financial management information system on performance of public sector: A case of Nairobi County Government. International Journal of Social Sciences and Entrepreneurship, 1 (12), 913-936.
6. Charfi, K., Shaibi, S., Louati, & Khatima. (2022). *Financial information systems and their role in financial decision-making: A case study of the Office for Promotion and Real Estate Management – Ain Temouchent* (Doctoral dissertation, University of Ain Temouchent).
7. Monteiro, A. P., Vale, J., Leite, E., Lis, M., & Kurowska-Pysz, J. (2022). The impact of information systems and non-financial information on company success. *International Journal of Accounting Information Systems*, *45*, 100557.
8. Savina, S., & Kuzmina-Merlino, I. (2015). Improving financial management system for multi-business companies. *Procedia-Social and Behavioral Sciences*, *210*, 136-145.
9. Hijazin, A. M. N. (2024). *Financial management information systems and their role in improving financial performance in municipalities*. *Journal of Human and Natural Sciences*, 5(1), 795–811

10. Hartikayanti, H. N., Bramanti, F. L., & Gunardi, A. (2018). Financial management information system: An empirical evidence.
11. Parikh, T., Ghosh, K., & Chavan, A. (2002). Design studies for a financial management system for micro-credit groups in rural India. *Acm sigcaph computers and the physically handicapped*, (73-74), 15-22.

Research Supervisor
Prof. Vani Laturkar

Research Student
Fahd Ali Hamad Saeed Garadan